

## Editorial

The present issue starts (page 1-3) with a report from a Symposium organised in June 2005 by the Royal Academy of Sweden on the occasion of awarding the internationally recognised Gregori Aminoff Prize to Ho-Kwang Mao. This prize has been given for the first time to Paul Peter Ewald in 1979 and later to almost thirty scientists - among them were André Guinier, Erwin Bertaut, Isabella Karle, Hugo Rietveld, Philip Coppens, Dan Shechtman and many others (see the list on page 3) - all having a considerable contribution to crystallography and related fields. This year prize is awarded to a leader of X-ray diffraction under non-ambient conditions, who pushed the high-pressure science towards limits reaching the  $p$ - $T$  conditions existing at the centre of the Earth. (To learn more on the high-pressure studies see, *e.g.* Ref. [1]) It is worth noting that all Aminoff prizes awarded since the beginning of 21<sup>st</sup> century were explicitly connected with synchrotrons serving as tools of the rewarded studies. This trend emphasises the essential role of synchrotron radiation in contemporary science. The number of existing synchrotron rings is as high as 75 with 20000 users each year [2]. The mentioned number of 75 relates to those existing at the Earth. Synchrotron radiation sources exist also out of our planet. The closest extra-terrestrial one is formed by ultra-relativistic electrons, with energies up to about 50 MeV, circulating around Jupiter along its radiation belts [3]. Synchrotron radiation from distant objects is also detected [4,5].

Almost whole volume of this issue is devoted to the 6th National Symposium of Synchrotron Radiation Users: the extended abstracts can be found on pages 8-47, and regular abstracts on pages 48-70. The contributions cover a large variety of subjects, from that on the initiative to construct a medium-energy synchrotron in Poland, the only large European country which does not

have any own synchrotron source (page 50), to absorption, photoemission and diffraction studies of modern bulk and thin-film and nano materials. The materials studied involve mainly binary or ternary semiconductors and perovskite- or spinel-type oxides, in particular those with interesting magnetic properties. Brief information on Polish Synchrotron Radiation Society can be also found, as well as references to past and future conferences having synchrotron radiation as at least one of their topics.

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### References

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- [5] D.M. Worrall, M. Birkinshaw, X-ray synchrotron emission from the oblique shock in the jet of the powerful radio galaxy 3C 346, *Monthly Notices Roy. Astronom. Soc.* **360** (2005) 926-934.